

TN2T - Republic Congo

By: Ronald Stuy PA3EWP

After our last adventure in 2010 to Democratic Republic of Congo (9Q50ON) we focused on the neighboring Republic of Congo for our next DXpedition.

In early 2011 we started with the preparations. The chairman of the local amateur club URAC would arrange for us the licenses, this is ultimately with many fits and starts (and corruption) succeeded.

It was very difficult to find a suitable location in Brazzaville. The choice was initially the university compound. But before our final decision had been taken, we all were still doubting about the location. Our final choice was the Malonda lodge in Pointe Noire. According to all reviews, this was the best place to stay in the Congo.

It was a park with 30 cottages, restaurant, bar and pool. After consultation with the owner we reserved 3 cottages which the outermost layers with lots of space around for the antennas. The park is not far from the sea. In December, we all booked, we had waited a long time especially since a variety of problems with the licenses. We had asked for the call TN2T. However, the authorization would be issued only in January 2012. We then took the risk to book late December, without the authorization that we had.

Eventually we had the papers one day before we left home. In the worst case, we would go on a domestic flight Pointe Noire – Brazzaville to get our licenses personally at the ministry of Telecommunications. But that was no longer necessary.

Team:

ON4BR, Carlo (mix mode operator)
ON4FG, Stefaan (SSB en CW operator)
ON4HIL, Patrick (SSB, RTTY operator)
ON4IA, Luc (mix mode operator)
ON6CC, Marc (mix mode operator)
PA3EWP, Ronald (mix mode operator)

ON4ATW, Theo was our pilot station in Belgium.

The journey:

On Saturday, January 21, the team has gone through Brussels, Paris to Pointe Noire Congo.

Because we had to bring all the materials ourselves we had 2 suitcases too much with us, also 2 suitcases were too heavy. But luckily we had to pay only 400 Euro's for the extra baggage.

Congo is in the same time zone as Belgium and the Netherlands, a jet lag problem was not applicable.

Aim:

Our aim of this DXpedition was to try to keep 3 stations 24 hours activate. We already had the experience that is very difficult with 6 men. We had 2 teams made. Our schedule was adjusted on the spot because we did not know what the times were for breakfast, lunch and dinner. We wanted to synchronize our shift changes with eating.

Each team had the ability to sleep 6 hours, but in practice this is often up to 5 hours. The first few days is no problem, but later in the week we all got problems. Often during our resting period during the day we went to sleep for a few hours.

The assembling:

Sunday, January 22 we arrived at 07:00 hours at the airport in Pointe Noire. After negotiations we were fairly quickly through customs. It took us nearly 100 Euro's, of course, to get settled. They all want to see money.



Arrival at PointeNoire

Around 09.00 o'clock we were at our destination. Our license was valid from 23 January, we had whole Sunday time to build the station before midnight. Before it was dark we had all the antennas up except 17 meters, the rest was done. In the evening we arranged all equipment inside the Shack. Around 22.00 o'clock we were ready. We immediately started the right shifts, the first team had gone to sleep until 02.00 hours the other team started at exactly at midnight. We would be operating for approx. 8 ½ days.

The antenna farm:

Band	TX antenna	RX antenna
160 meter	L-antenna 26m vertikaal	Beverage + K7TJR
80 meter	L-antenna 18m vertikaal	Beverage
40 meter	Vertical	Beverage
30 meter	Vertical	
20 meter	Vertical + HEX beam	
17 meter	Dipole + HEX beam	
15 meter	Vertical + HEX beam	
12 meter	Dipole + HEX beam	
10 meter	Vertical + HEX beam	

Our location was about 100 meters from the beach 30 meters above sea level. Because of this situation, the Hex functioned better than the vertical antennas. For 12 and 17 meters in between, we have replaced the vertical antennas for dipoles. We cut some wires for a dipoles, put it up and the swr 1:1 across the band after the first measurement. Then we additionally checked whether it was true, because normally, the antenna is too long or too short and rarely right the first time. So both dipoles were ready in less than 30 minutes.

The Equipment

Station	Radio	Amplifier
#1	Elecraft K3	Homemade 600 watt
#2	Elecraft K3	Expert 1K
#3	Elecraft K3	Expert 1K

At each station there was a computer connected via network. The software used was WIN-test version 4.91. This worked perfectly without any problems during the whole DXpedition. The interface between the computer and the radio was a Microham MK2 for each radio.

There was a spare radio Elecraft K2/100 available. Also we had a complete set of bandpass filters with us for between the radio and amplifier and for the regular bands we used also the 4O3A bandpass filters behind the amps.



Hex-Beam

Furthermore, we had over 800 meters Aircell 5 coaxial with us. The mutual interference between the stations were minimal to absent.

Operating:

I needed can write a book about this subject. Not only the work of a DXpedition but also the handling of a pile-up. And then we did not even talk about the behavior of the DX stations calling in the pile-up.

The success of a DXpedition depends largely on the operator on the DX side. Obviously, experience is important but don't forget everyone has to learn. (My personal opinion is, therefore, a less good operator better than no operator).

Very often we had a very high QSO rate in CW and SSB. But here you are very dependent on the opposite stations.



The Shack

What I just briefly want to mention, something were many operators can learn from (even the great DXers!)

If the DX station is calling you with your call and this is correct, why do you still repeat your own call 1, 2 or sometimes 3 times? Confirm that it is good and give a report!

At the same time you gave your call 3 times you take away time from another station to make a QSO. And do not forget if you call and there's QRM on your transmission, it is possible that the DX station starts to doubt whether it was good or not at the first time. Then he will again ask for a confirmation. It takes even longer until the QSO is complete.

And what certainly is a big annoyance, to call with only 2 letters of your suffix. Call always with your complete call-sign!!! Do not come with the weak excuse that it is faster, it is less likely, a QSO handling cost more time.

If a QSO is established with another station, stop calling until the QSO is ready. A good experienced DX station operator will never work a station that is interrupting. I will never work a station that calls between another QSO, I turn away from that QRG or try to ignore the interrupting station as long as possible.

We had no direct internet at our location, this often gave problems, especially when there are 2 other major DXpeditions active. We were both double and sometimes listened to the same up area. It was also not possible for us to publish the log regularly. Therefore we had pretty much duplicate QSOs (4%) because the callers were not sure whether or not they were in the log. So next day they called again.

On average we have a day over the 5,000 QSOs made. We are continuously active. 2 times per day they switched from the general power to a generator which meant that we have about 2 minutes QRX, these we were not planned. We also had one of the last days an unexpected visit in the shack of a snake. it took a while before we found him and had put it back outside. We did not take any chances because we did not know whether the snake was poisonous or not. In retrospect the snake was not poisonous.



Team and crew of the hotel

The last evening we have dinner with the whole team, here we have taken the time to relax and enjoyed the bottles of wine. When we came back after 2 hours a question mark sufficient to get going again on CW with the pile-up. Very often it was enough to give 1 time a CQ. Then for hours you had your pile-up, which often ran into the next shift. We were lucky that the high bands were open. Regular 10 or 12 meter were wide open till midnight.

A disadvantage is that at end of the evening you had to make a choice or to the low bands, and only 1 QSO per minute or on the high bands 5 times as much QSO's.

Below is the list breakdown per band per mode.

Summary					
BAND	SSB	CW	RTTY	OTHER	DUP
160	0	786	0	0	49
80	0	847	0	0	29
40	2206	1622	0	0	194
30	0	3111	381	0	156
20	5035	3846	614	0	386
17	3909	3545	521	0	309
15	5297	3629	390	0	362
12	5745	2535	279	0	431
10	2812	3211	251	0	176
50	0	0	0	0	0
TOTAL	25004	23132	2436	0	2092
		TOTAL QSO: 50 572			

The day before our departure, we had already disassembled the low band antennas. The last day after breakfast the last QSO was made. Then we started everything to disassemble. Around 15.00 pm we were ready. After a quick shower around 17.30 pm we went to the airport for our return trip. The next day around 07.00 am we arrived in Paris then by TGV (train) to Brussels. The trip went well, the only problem was the temperature. We had lived 10 days in temperatures well above 35 degrees and on arrival it was -5 degrees. A difference of over 40 degrees - bbbrrrrrr.

For more information we refer you to our website. Here are many pictures and even audio files from our side of the pile-up.

During our stay we regularly posted our log on Clublog, so many were able to use our online log. For more information about Clublog see <http://www.clublog.org>



QSL of TN2T

Daily we had contact with our pilot station Theo ON4ATW for the latest new. At present our full log uploaded to LOTW (Logbook Of The World) see: <https://p1k.arrl.org/lotw/default>.

If you want a QSL card, on our website you can make the request via OQRS (Online QSL Request System). Or just send a card via the bureau or CBA to Tim MOURX our QSL manager for this DXpedition.

For more information see our website: <http://www.tn2t.be>

On behalf of the whole team, we thank the individual and club sponsors for their contribution to this radio adventure.



Carlo and his local friends

Edited for GDXF by Prof. Dr. Uwe Jaeger, DJ9HX